

Network Centric Warfare: The Australian Perspective



Agenda

- Function of NCW in ADF Warfighting Concept: Multi-dimensional Manoeuvre
- Dimensions and premises of NCW
- Risks
- ADF implementation of NCW



Part 1 - NCW in the ADF Future Warfighting Concept



ADF Future Warfighting Concept

- The seamless force
- The networked force
- The force conducting effects based operations



Warfighting Functions

- Force Application
- Command and Control
- Information Superiority and Support
- Force Protection
- Force Deployment
- Force Generation and Sustainment



Multi-dimensional Manoeuvre

Tempo:

simultaneity, create decision dilemmas

Agility

flexible, adaptable, cope with the unexpected

Fighting Asymmetrically

 identifying and capitalising weakness in adversary's strategy



Part 2 Dimensions and Premises of NCW



Dimensions of NCW

Network Dimension

 info sharing, info systems, applications, data

Human Dimension

 reaction and interaction to the network to act more effectively



Premises of NCW

- Professional Mastery
- Mission Command
- Network
- Situational Awareness
- Self-synchronisation



Professional Mastery

Professional Mastery is fundamental to any application of NCW.

- perform to high standard, trust
- organisation
- commanders
- training
- doctrine



Mission Command

Mission Command will remain an effective command philosophy into the future.

- commander's intent
- initiative
- vulnerability of networks and
- communications systems



Network

Information and intelligence will be effectively shared if a network is built that connects engagement, sensor and C2 systems.

- C2, sensor, engagement systems
- connect-collect-use-protect
- point of overlap between human and network dimension
- information, cognitive, physical domains



Shared Situational Awareness

Robust networks will allow the ADF, and supporting agencies, to collaborate more effectively and achieve shared situational awareness.

- Absorb, collaborate, understand
- quality of network and people



Self-synchronisation

Shared situational awareness will enable self-synchronisation, which helps warfighters to adapt to changing circumstances and allow them to apply Multi-dimensional Manoeuvre more effectively.

- Evolve from top down synchronisation
- recognise opportunities
- faster actions by collective initiative of lower level commanders



A Warfighting Advantage

Enable

- operational art
- lower level commanders to adjust to meet commander's intent
- action without waiting for instruction

Result

agility, tempo and asymmetric operations



Part 3 -Risks **16**



5 Risks to NCW

- Failure to appropriately incorporate Human Dimension
- Failure to recognise network vulnerability
- Pursuit of the 'transparent' battlespace
- Failure to guard against information overload
- Inappropriate balance of capability development to detriment of engagement systems.



Part 4 - ADF Implementation of NCW

Approach to Implementing NCW







2020 3rd Generation **Seamless Force**

Collaboration & Shared Situation Awareness (Networking elements & platforms)

> **Underlying** NOW Information Infrastructure

(Network)

Human Dimensio (human network recruiting, traini education. organization, culture)



NETWORK **AFTER MASS** NEXT

LEARN, BY DOING

LEARN BY DOING

-NEW RELATIONSHIPS -AGILE FORCE **PACKAGING**

> SPIRATION: THE

- -ROBUST AND RELIABIMITESS -FLEXIBLE
- -MANAGED 'END TO EN

NEW RELATIONSHIP NEW ORGANISATION NEW C2 DIFFERENT PEOPLE?

BACKCASI

Create the foundation for I

Discover / create better collaboration and enhance network capacity

Seamless Force Characteristics determined from 2010 onwards



Implementing NCW - coordination with allies



Conclusion



Questions